

State of California
AIR RESOURCES BOARD

Addendum to the Supplement to the Final Statement of Reasons for Rulemaking
Including Summary of Comments and Agency Responses

**PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE REGULATIONS
APPLICABLE TO PORTABLE DIESEL ENGINES AND DIESEL ENGINES USED IN
OFF-ROAD AND ON-ROAD VEHICLES**

Public Hearing Date: January 28, 2010
Agenda Item No.: 10-1-2

On December 9, 2010, ARB staff submitted part 2 of the rulemaking package for the amendments to the regulations applicable to portable diesel engines and diesel engines used in off-road and on-road vehicles to the Office of Administrative Law for review and approval. The ARB is submitting this addendum to the supplement to the Final Statement of Reasons for insertion in Office of Administrative Law (OAL) File Number 2010-1209-01S.

Nonsubstantial Changes Made to the Final Regulation Order

ARB has made some minor nonsubstantial changes to the final regulation order for punctuation, grammar, accuracy, clarity, and proper authority and reference citations. The changes made do not materially alter any requirement, right responsibility, condition, prescription, or other regulatory element of any California Code of Regulations (CCR) provisions. They are as follows:

1. 13, CCR, 2452(mm)(1) ~ Removed the strike-out of the comma after 2006.
2. 13, CCR, 2453(f) ~ Added an "s" to the word "district" in the second to last sentence to make it plural.
3. 13, CCR, 2456(f)(1) ~ Corrected the word "compress-ignition" in the last sentence to "compression-ignition" by adding in underline the "ion".
4. 13, CCR, 2458(a)(1)(D)&(E) ~ Added semi-colons after both of these sections for consistency.
5. 13, CCR, 2458(a)(2)(A) ~ Corrected the capitalization error by making "Engine" "eEngine".
6. 13, CCR, 2458(b) ~ Corrected the word "regulation" just prior to January 1, 2007 by adding an "s" to make it plural like it is in the current code.
7. 13, CCR, 2458(g) to (h) ~ The "*****" was removed as it is unnecessary.

8. 13, CCR, 2451(c)(4) ~ added the date (2009) to the referenced 40 CFR 60.671
9. 17, CCR, 93116.1 – 93116.3 ~ Changed all the “California Code of Regulations” references to “Cal. Code Regs.” in order to be consistent with what was done in the title 13 sections.
10. 17, CCR, 93116.2(a)(20) ~ Corrected the “an reduction” in this subsection to “a reduction” by striking through the n.
11. 17, CCR, 93116.3(b)(2)(E)2. ~ At the very end of the subsection, corrected “(E)(2)” to “(E)2.”
12. 17, CCR, 93116.3(c)(1). In the chart, on the fourth column the code has the greater-than-or-equal-to sign, which should be the greater than sign. This was corrected by striking the greater-than-or-equal-to sign “≥” and underlining the greater-than sign “>”.

Summary and Response

Comment: Comment letters 1 and 11 raise the issue of questionable health justification for these regulations because of reports of an ARB diesel particulate matter health effects researcher having admitted to falsifying his credentials.

Agency Response: While the commentor is correct in that Mr. Tran falsely claimed to have a Ph.D. degree from UC Davis, we still stand behind the conclusions of the PM2.5 Mortality staff report because it went through a rigorous, independent scientific peer review prior to the report’s release, and the report was re-reviewed in light of the concerns about Mr. Tran’s role. All of the reviews found that the report conclusions were well founded and properly supported. ARB staff continues to fully support the use of the report’s findings in our programs to reduce diesel particulate matter. Further information on how we addressed these issues and reached this conclusion is presented below.

Overall Efforts to Determine the Scientific Credibility of the PM2.5 Mortality Study: The PM 2.5 Mortality staff report went through three levels of formal, independent, external peer review before the report was finalized, and did not rely upon the research or original work of ARB staff. However, in light of the external concerns about Mr. Tran’s credentials and honesty, we asked all ten external reviewers (identified below) to re-review the report. All of the reviewers confirmed their original comments on the report. For the reasons summarized below, we continue to be confident of the validity of the conclusions of the PM2.5 Mortality report.

First, we only used scientific publications from the open peer-reviewed literature. We considered 78 peer-reviewed scientific journal articles (including Professor Enstrom’s publication) and eight reports from the National Academies of Science, the U.S.

Environmental Protection Agency and the World Health Organization. We did not include secondary literature, such as books or opinion pieces.

Second, we received comments throughout the process (including review of the final report) from our three advisors: Dr. Jonathon Levy from Harvard, Dr. Arden Pope from Brigham Young University and Dr. Bart Ostro from the Office of Environmental Health Hazard Assessment. They publish frequently in the areas of air pollution and statistical relationships with premature death, the main subject of our report, and concurred with our findings.

Third, our draft report was reviewed following the Cal/EPA external scientific peer review guidelines for independent review. In this process the UC Berkeley Institute of the Environment selects the peer reviewers without input from staff. Staff was only allowed to submit a list of individual who may have a conflict of interest. Furthermore, candidates were accepted as reviewers only if the disclosure information showed they had no conflict of interest related to the report. The six reviewers identified by UC Berkeley and selected by the Cal/EPA Project Director to review the proposed methodology in the PM_{2.5} Mortality staff report were: Dr. Jeff Brook from Environment Canada, Professor Mark Eisner of UC San Francisco, Professor Richard Flagan of the California Institute of Technology, Professor Alan Hubbard of UC Berkeley, Professor Joel Kaufman of the University of Washington, and Professor Joel Schwartz of Harvard University. Collectively, their expertise is based on research in the areas of chronic obstructive pulmonary disease related to air pollution, statistical analysis of epidemiological data, particle formation and measurements in air, air quality risk management, air pollution and daily mortality associations, and epidemiology. They all concurred with our basic conclusions.

In addition, the report went through several levels of informal internal review. Linda Tombras Smith, a Ph.D. in Chemistry (with a Biochemistry thesis topic) from UC San Diego with lead experience on PM and other major ambient air quality standard reviews, oversaw the entire project and reviewed all versions of the report. Dr. Smith was Mr. Tran's direct supervisor.

At the request of the Engine Manufacturers Association, the diesel PM exposure estimates were reviewed by Professor Philip Hopke of Clarkson University. Dr. Hopke was supportive of the basic conceptual framework of ARB's approach.

At the request of Board Chairman Mary Nichols, ARB staff convened a panel of worldwide PM health effects experts to discuss two important aspects of the staff report, the threshold of PM_{2.5} health effects and the linearity of the dose-response relationship. Participants included U.S. EPA, Environment Canada, the World Health Organization, the Chairs of U.S. EPA's Clean Air Scientific Advisory Committee and Cal/EPA's Scientific Review Panel, the Health Effects Institute, and several internationally recognized academic researchers. There was general concurrence on the issues discussed.

Comment: Comment letter 5 says the inventory is wrong and not adjusted for the economic decline.

Agency Response: ARB disagrees. The accuracy of the inventory of certain on-road sources was questioned several years ago. However, the emissions sources subject to the Portable ATCM and eligible for the Portable Program are non-road sources and were not included in that inventory. Hence any discrepancies that may have existed would not impact the non-road inventory. ARB acknowledges that the California economy has been impacted by the world wide recession. Further, because of the uncertainty of the long term effects of the recession, quantifying this impact for inventory purposes would be at best problematic.

Comment: Comment letter 22 says the one-year extension clock should begin to run once ABR has received a waiver from US EPA to regulate these engines.

Agency Response: ARB disagrees. The one year extension provision was designed to provide owner/operators with an option to address the ban on Tier 0 engines. This option is not an emissions standard and would therefore be enforceable without need of USEPA authorization.

Further Discussion

OAL requested information on the context and reasons for the deletion which occurred in the section 15-day notice in section 2451(c)(9)?

The language in question was included in the regulation during the energy crisis, back in 2000, 2001 to address a specific issue that arose as a result of the times. People would sign up in demand reduction programs to reduce their energy costs, but when the utility would call on them to reduce their load they would go out and rent a portable power unit to power their stationary source. (This issue was discussed in the ISOR at the time.) I think everyone is in agreement that the energy crisis is now over, so we see the provision as obsolete and did not see any reason to keep the provision in.

Section 2451(c) provides examples of when portable power cannot be used. For several reasons, the issue of what constitutes a remote location has become a discussion topic. Rather than going in and developing new definitions, and other regulatory language, trying to accommodate new situations, we believe it is better to remove the provision because the reason for it no longer exists.

The commenters were concerned that they could no longer use portable power in remote locations. This was a misunderstanding on their part. It is simply that they cannot use portable power to operate stationary sources where grid power is available. This has always been the case. We discussed this matter with the commenters and believe that they now understand the change and don't have a problem with it.